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**(54) A PLASTIC BAG FOR LINING AN UPWARDLY OPEN CONTAINER, IN PARTICULAR A BED PAN**

PLASTIKSACK FÜR EINEN NACH OBEN OFFENEN BEHÄLTER, INSBESONDERE EINE  
BETTPFANNE

UN SAC EN PLASTIQUE POUR UN RECIPIENT OUVERT VERT LE HAUT, EN PARTICULIER UN  
BASSIN HYGIENIQUE

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(73) Proprietor: HANSEN, Sonja Marianne Juel  
DK-3320 Skaevinge (DK)

(72) Inventor: HANSEN, Sonja Marianne Juel  
DK-3320 Skaevinge (DK)

(74) Representative: Raffnsøe, Knud Rosenstand et al  
DK-2630 Taastrup (DK)

(56) References cited:  
WO-A-86/01098 US-A- 3 906 555  
US-A- 3 936 890 US-A- 4 011 606

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**EP 0 591 450 B1**

## Description

The invention relates to a plastic lining bag for lining a relatively flat upwardly open container, in particular a bedpan, and including adhesive means for temporarily fastening the back to the container.

Bedpans are generally used in hospitals or other larger institutions in which comparatively heavy and expensive equipments are available with the view of cleaning and sterilizing bedpans after use.

During recent years there has been an increasing need for using bedpans in a mobile connection with a view to improve the municipal home nursing, where cleaning and sterilizing cannot be effected in an appropriate manner as stated above. In this respect, use has been made of disposable bedpans made from plastic which are relatively expensive or use has been made of usual stainless steel bedpans which after use were washed with strong cleaning materials under primitive conditions in patient's lavatory. The latter method suffers from working inconveniences as well as from environmental inconveniences in general.

As an alternative, it has been attempted to make use of a common stainless steel bedpan, placing therein a plastic bag which is removed with the unclean side facing inwards after the bedpan has been emptied. The plastic bag may in this connection completely encapsulate the stainless steel bedpan or simply be inserted into the interior of the bedpan and over the rim. This alternative, however, suffers from the drawback that the plastic bag has a tendency to adhere to the patient so that the plastic bag is drawn out of the bedpan when the body wastes do not have a sufficiently high weight. The contents will then be spilled over the bed.

To remedy this problem various solutions have been suggested in the prior art for providing a lining bag or pouch for a bedpan with adhesive means for temporarily fastening the bag to an upper rim portion of the bedpan.

In US-patent No. 3 936 890 a bag type liners suggested having an initial flat form matching the bottom face of the bedpan and being provided with radial fold lines and a number of adhesive tabs extending radially inwards from the periphery of the liner. In use this bag is folded upwardly over the rim portion of the bedpan and the tabs are fixed to the external side thereof. Removal of such a bag will require individual attachment of each of the tabs distributed around the circumference of the bedpan and the above mentioned drawback following from the tendency of a plastic bag to adhere to the patient will not be completely remedied.

This also applies to a liner pouch disclosed in US-patent No. 4 011 606, which is provided with adhesive tabs at opposite ends to be attached in use to the outer side of the bedpan only at the forward and rear parts thereof, as well as to a disposable bedpan liner bag disclosed in published international patent application WO86/01098, which is provided with a pressure sensitive adhesive coating in an area covering in use a rim portion only of the bedpan.

It is the object of the invention to solve the problem outlined above in a simple and inexpensive manner. According to the invention this is obtained by applying the adhesive means to the bag so as to extend in use substantially entirely across a bottom face of the container and so as to adhere strongly to the bag and faintly to said bottom face to allow easy detachability of the bag after use.

By arranging the adhesive coating on the side of the plastic lining bag so that in use this will adhere directly to the bottom of a container, such as a bed-pan, entirely across the bottom face, and designing it to adhere strongly to the plastic bag and faintly to the container the plastic bag will be safely retained in the container in use and after use the uncleaned plastic bag may be readily removed.

In connection with the removal the bag may be folded or rolled with the unclean side turned inwardly and the position of the adhesive means across the wall part of the bag which has been in contact with the bottom of the container provides an efficient sealing of the bag.

In a particularly advantageous embodiment the adhesive coating is formed as a double-adhering foil. The different adhesion may advantageously be obtained by applying different adhesive coatings to the two adhesive sides of the foil. It is thus obtained that the adhesive coating and the plastic bag may be purchased separately and different plastic bags may be used according to desire, and the strong and faint adhesion, respectively, may be obtained by means of different adhesive coatings.

The different adhesion on the two sides may alternatively be obtained in that the same adhesive is used on the two sides of the foil but that the adhesive on the faintly adhering side is applied as a grid pattern. The designing of the double-adhering foil as a sheet and with substantially the same shape as the bottom of the container provides for obtaining a simplified handling of the foil.

In order to facilitate the removal of the bag without tearing it, in particular in connection with thin plastic bags, the adhesive foil sheet may be provided with at least one non-adhering tearing-off tab which in the position of use extends upwards along the internal side of the container towards the upper rim thereof.

The invention will now be explained by means of examples of embodiment with reference to the drawings, in which

Fig. 1 is a cross-section showing a bedpan with adhesive coating and a plastic bag according to the invention,

Fig. 2 is an enlarged section of Fig. 1,

Fig. 3 is a sheet-shaped double-adhering foil with grasp tabs according to the invention, and

Fig. 4 is an enlarged section along IV-IV in Fig. 3.

In the embodiment of the invention illustrated in Figs 1 and 2 the device consists of an adhesive coating 3 posi-

tioned between the container 1 which in the illustrated example is a bedpan, and the plastic bag 2. In this example the adhesive is of such a type that the adhesion to the plastic bag is strong and the adhesion to the bedpan is vague.

Figs 3 and 4 show an example of a sheet-shaped double-adhering foil 6 with grasping tabs 5. As best seen in Fig. 4 the sheet-shaped double-adhering foil consists of a carrier foil 12 forming also the grasping tabs 5, an adhesive coating 9 for adhesion against the plastic bag and having a cover sheet 7 with a tearing-off tab 11 and an adhesive coating 10 applied as a grid pattern and having a cover sheet 8 with a tearing-off tab 13.

By using said sheet-shaped double-adhering foil the cover sheet 8 which may advantageously have another colour than the cover sheet 7 is at first torn off by means of the tearing-off tab 13 and the foil is placed inside the basin of the bedpan 1, the grasp tabs 5 being oriented upwardly along the internal side of the bedpan. Cover sheet 7 is then torn off by means of the tearing-off tab 11 and the plastic bag is fixedly adhered to the bottom of the bedpan and everted over the sides. (See Fig. 1). After use the plastic bag and the adhesive foil are removed from the bedpan and disposed of while using the grasping tabs 5, following which the bedpan is ready for receiving a new foil and plastic bag.

The device according to the invention may be used for other purposes requiring a plastic bag to be temporarily fastened in an upwards open container, e.g. a disposal bag in a bin as generally used on railway stations, in parks, at bus stops and the like, or a plastic bag in a closet pail or in a chemical closet.

The device is supposed to be manufactured in many varying versions, such as a plastic bag provided with an adhesive coating and with a cover sheet or double-adhering foil or sheet foils delivered separately along with plastic bags or applied to plastic bags.

#### Claims

1. A plastic lining bag for lining a relatively flat upwardly open container, in particular a bedpan, and including adhesive means for temporarily fastening the back to the container, characterized in that the adhesive means is applied to the bag so as to extend in use substantially entirely across a bottom face of the container and so as to adhere strongly to the bag and faintly to said bottom face to allow easy detachability.
2. A plastic lining bag according to claim 1 characterized in that the adhesive means is supplied as a coating to a part of the bag to be placed in use against said bottom face.
3. A plastic lining bag according to claim 1, characterized in that the adhesive means is formed as a double-adhering foil (6).

4. A plastic lining bag according to claim 3, characterized in that the double-adhering foil has different adhesive layers on the two sides.

5. A plastic lining bag according to claim 3, characterized in that the same adhesive (9, 10) is used on the two sides of the foil but that the adhesive (10) on the faintly adhering side is applied as a grid pattern.

6. A plastic lining bag according to claims 3, 4 or 5, characterized in that the double-adhering foil is sheet-shaped and has substantially the same form as the container bottom.

7. A plastic lining bag according to claim 6, characterized in that the double-adhering foil (6) is provided with at least one non-adhering tearing-off tab (5) which in the position of use extends upwards along the internal side of the container towards the upper rim thereof.

#### Patentansprüche

1. Plastiksack für einen verhältnismässig flachen, nach oben offenen Behälter, insbesondere eine Bettpfanne, umfassend Klebemittel zum vorübergehenden Festkleben des Gesässes am Behälter, dadurch gekennzeichnet, dass das Klebemittel am Sack so aufgetragen wird, dass sich dessen Benutzung im wesentlichen über ganze die Bodenfläche des Behälters erstreckt und derart, dass ein starkes Festkleben am Sack und ein schwaches Festkleben an der Bodenfläche erzielt wird, um ein einfaches Abnehmen des Sackes zu ermöglichen.
2. Plastiksack nach Anspruch 1, dadurch gekennzeichnet, dass das Klebemittel als eine Schicht auf den bei Benutzung gegen die Bodenfläche wendenden Teil des Sackes aufgetragen wird.
3. Plastiksack nach Anspruch 1, dadurch gekennzeichnet, dass das Klebemittel aus einer doppelt klebenden Folie (6) ausgebildet ist.
4. Plastiksack nach Anspruch 3, dadurch gekennzeichnet, dass die doppelt klebende Folie auf den zwei Seiten verschiedene Klebeschichten aufweist.
5. Plastiksack nach Anspruch 3, dadurch gekennzeichnet, dass auf den beiden Seiten der Folie dasselbe Klebemittel (9, 10) benutzt wird, dass aber das Klebemittel (10) auf der schwach klebenden Seite als ein Gittermuster aufgetragen wird.
6. Plastiksack nach Anspruch 3, 4 oder 5, dadurch gekennzeichnet, dass die doppelt klebende Folie wie ein Papierblatt ausgebildet ist und im wesentlichen die Form des Behälterbodens aufweist.

7. Plastiksack nach Anspruch 6, dadurch gekennzeichnet, dass die doppelt klebende Folie (6) mit zumindest einem nicht klebenden Abreisflansch (5) versehen ist, der in der Gebrauchsstellung entlang der Innenseite des Behälters zu dessen 5 oberen Kante verläuft.

## Revendications

1. Sac plastique de garniture d'un récipient relativement plat, ouvert vers le haut, en particulier un bassin, et comportant des moyens adhésifs pour fixation temporaire au dos du récipient, caractérisé en ce que les moyens adhésifs sont appliqués au sac de manière telle qu'en cours d'emploi, ils s'étendent 10 essentiellement sur toute une face du fond du récipient, en adhérant fortement au sac et faiblement à ladite face du fond, pour permettre un détachement aisé. 15
2. Sac plastique de garniture selon la revendication 1, caractérisé en ce que les moyens adhésifs sont fournis sous forme d'un revêtement sur une partie du sac à placer, lors de l'emploi, contre ladite face du fond. 20 25
3. Sac plastique de garniture selon la revendication 1, caractérisé en ce que les moyens adhésifs sont constitués par une feuille (6) collante sur les deux faces. 30
4. Sac plastique de garniture selon la revendication 3, caractérisé en ce que la feuille collante sur les deux faces comprend des couches adhésives différentes sur les deux faces. 35
5. Sac plastique de garniture selon la revendication 3, caractérisé en ce que le même adhésif (9, 10) est utilisé sur les deux faces de la feuille, l'adhésif (10) sur la face d'adhérence faible étant cependant appliqué sous forme d'un réseau en grille. 40
6. Sac plastique de garniture selon les revendications 3, 4 ou 5, caractérisé en ce que la feuille collante sur les deux faces est sous la forme d'une plaque et présente essentiellement la même forme que le fond 45 du récipient.
7. Sac plastique de garniture selon la revendication 6, caractérisé en ce que la feuille collante sur les deux faces (6) est pourvue d'au moins une languette non-adhésive (5) d'arrachage qui, en position d'emploi, s'étend vers le haut le long de la face interne du récipient, en direction du bord supérieur de celui-ci. 50

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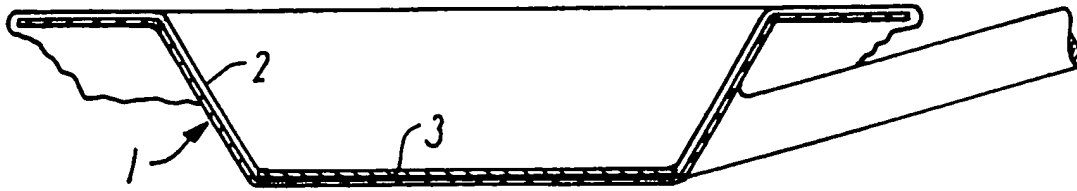


FIG. 1

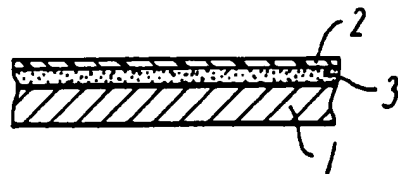


FIG. 2

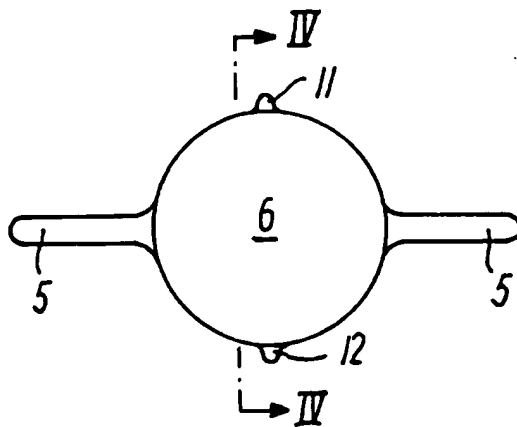


FIG. 3

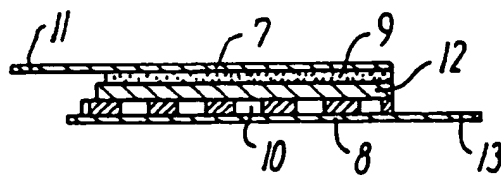


FIG. 4